

IN THE CLAIMS:

1. (Original) A process for manufacturing rhomboidal blades for axial turbo engines, the blades having a blade footing of a rhomboidal cross section and a blade body, the process comprising the steps of:

hot rolling a bar-shaped input stock up to a cross section having a shape of a rhomboid adapted to a shape of the cross section of the rhomboidal blade footing and being larger on all sides than a maximum cross section of the blade only by a minimum oversize for machining of 1 to 3 mm;

cutting the bar-shaped input stock into blanks having a length corresponding to a length of the blade increased by clamping ends necessary for machining;

10 forming the blade footing and the blade body by machining the blank.

2. (Currently Amended) A process in accordance with claim 1, wherein:

said machining is milling and is performed on the blank with said cross section having said shape of a rhomboid;

5 said hot forming of said bar-shaped input stock is performed by one of hot rolling, drop forging, press forging, and precision forging.

3. (Currently Amended) A process for manufacturing a turbine blade having a maximum cross section of a rhomboidal shape, the process comprising the steps of:

providing a machining process for removing material from a workpiece to create a final

shape, said machining process requiring the workpiece to be larger than the final shape by a
5 minimum machining allowance in order to create the final shape;

hot forming a rolling bar stock to have a bar stock cross section with a rhomboidal shape, a maximum size of said bar stock cross section being equal to the maximum cross section of the turbine blade plus said minimum machining allowance of said machining process;

10 cutting said bar stock with said rhomboidal shape into a blank having a length larger than a length of the turbine blade;

machining said blank with said rhomboidal shape to form the turbine blade using said machining process.

4. (Cancelled)

5. (Original) A process in accordance with claim 3, wherein:

said machining process includes milling.

6. (Currently Amended) A process in accordance with claim 3, wherein:

said hot forming rolling includes hot rolling on a mill train with rollers that are calibrated according to said bar stock cross section.

7 - 9. (Cancelled)

10. (Currently Amended) A process for creating blades with a blade footing of a rhomboidal cross section and a blade body, the process comprising the steps of:

determining a maximum cross section and length of the blades;

hot forming a bar shaped input stock from a first shape into with a substantially rhomboidal cross section, said cross section of said input stock being larger than said maximum cross section of the blades by a machining allowance;

cutting said bar shaped input stock with said substantially rhomboidal cross section into blanks having the length of the blades;

machining said blanks with said substantially rhomboidal cross section to form the blades according to said machining allowance.

11. (Original) A process in accordance with claim 10, wherein:

said machining is milling.

12. (Original) A process in accordance with claim 10, wherein:

said blanks have a length of the blades plus a clamping length.

13. (Original) A process in accordance with claim 10, wherein:

said machining has a minimum machining allowance, said input stock is larger than said maximum cross section of the blades by said minimum machining allowance.

14. (Original) A process in accordance with claim 10, wherein:
said hot forming of said bar-shaped input stock is performed by hot rolling.

15 - 16. (Cancelled)

17. (Currently Amended) A process in accordance with claim 10, wherein:
said machining is milling;
said blanks have a length of the blade plus a clamping length;
said machining has a minimum machining allowance, said input stock being larger than
5 said maximum cross section of the blade by said minimum machining allowance;
said hot forming of said bar-shaped input stock is performed by one of hot rolling, drop
forging, press forging, and precision forging.

18. (New) A process in accordance with claim 10, wherein:
said first shape is different than said substantially rhomboidal cross section.

19. (New) A process in accordance with claim 10, wherein:
said hot forming includes hot rolling on a mill train with rollers that are calibrated
according to said bar stock cross section.

20. (New) A process in accordance with claim 11, wherein:

said milling has a minimum machining allowance, said input stock is larger than said maximum cross section of the blades by said minimum machining allowance.

21. (New) A process in accordance with claim 1, wherein:
said hot rolling includes hot rolling on a mill train with rollers that are calibrated according to said bar stock cross section.